Corps prepares to breach levees to help drain N.O. areas

The U.S. Army Corps of Engineers will begin levee breaching operations to breach levees to allow Hurricane Katrina floodwaters to drain from the Chalmette area. This area flooded because of failures along the Industrial Canal. Chalmette is a major suburb just downriver from New Orleans.

Backhoes mounted on marsh buggies and draglines mounted on barges will cut breaches in the levees. Marsh buggies are tracked vehicles whose wide tracks enable them to operate in soft, marshy terrain.

One cut will be made in the levee along the Mississippi River Gulf Outlet, between the Bayou Bienville and Bayou Dupre floodgates. Another cut will be made in the hurricane-protection levee near the Caernarvon Freshwater Diversion Canal. These cuts, or breaches, will be closed when the inside water elevation equalizes with water outside. The pump stations will then remove the remaining water.

Work is expected to begin soon on the Industrial Canal breaches. The Corps intentionally has not yet begun the work. The breaches have been useful meanwhile, allowing gravity to drain floodwater from the Chalmette-area basin. The reverse drainage has been strong and clearly visible in whitewater flow depicted in aerial photographs.

Similar plans are called for the two levee rings in Plaquemines Parish, one on the east bank and three on the west bank of the Mississippi River.

Lake Pontchartrain, the source of the majority of the water in the city, has meanwhile returned almost to normal elevations. The lake is a brackish arm of the Gulf of Mexico. Further east, the water inside the levees came from Lake Borgne, another arm of the Gulf and from Gulf waters beyond Borgne. These sources fed the drainage and navigation canals on which Katrina breached the floodwalls.

On east side of the 17th Street Canal, the closure was 75 percent complete by midday Friday and a complete closure was expected by nightfall. Helicopters were dropping large sandbags made of strong, synthetic materials, and heavy equipment on the ground has been placing rock. Ground access was created by building a rock road more than 700-feet long from Hammond Highway, which is about 700 feet lake-ward of the breach.

The 17th Street Canal is a drainage canal whose dimensions and an important bridge, integral to the flood control system, would not permit entry of barges and towboats to haul rocks and placement cranes.

To the east in New Orleans, on the London Avenue Canal, the state Department of Transportation and Development was placing rubble obtained by ripping out Lakeshore Drive to

build a closure dam where the canal meets Lake Pontchartrain. The Corps, meanwhile, was making arrangements for rock to supplement the rubble at the closure. Completion of the closure dam will stabilize the London Canal sufficiently so work can begin to close the two floodwall breaches on the canal's west side.

Navigation status

The Corps boat Lafourche completed a quick, centerline-only hydrographic survey of the Mississippi River to the sea buoy at the mouth of Southwest Pass. Depths were 49 feet in Southwest Pass. The survey found no shoaling or sunken vessels along the centerline. However debris and numerous wrecked boats were observed along both sides of the channel.

The river stretch surveyed is about 250 miles long. It includes four of America's 11 largest ports: the Port of South Louisiana, No. 1; New Orleans, No. 5; Baton Rouge, No. 10, and Plaquemines, No. 11. These ports' tonnages are so large due to traffic in bulk cargoes such as grain, petroleum, chemicals and fertilizer.

The Corps is working with the U.S. Coast Guard, which has reopened the river to limited traffic. The USCG Marine Safety Office in New Orleans declared the river open to vessels with a draft of 35 feet or less, daylight only, with one-way traffic in certain stretches.

On the Gulf Intracoastal Waterway, a 12-foot depth barge channel from Brownsville, Texas, to Apalachicola, Fla., all of Louisiana navigation locks were open except for three in the New Orleans area. Only work to raise a nearby railroad bridge was necessary to reopen the Harvey Lock on the west bank of the river. Downstream at the Algiers Lock, the facility is unmanned and security is needed to reopen it.

On the east bank at the Industrial Canal Lock, the lockmaster had raised the nearby St. Claude Avenue Bridge. However, hostility from citizens wanting to cross the canal forced him to lower it once again. Security is needed to reopen the lock to traffic.

The Corps was making arrangements for survey boats to check channels in smaller waterways along the Gulf Coast.